

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
6 January 2005 (06.01.2005)

PCT

(10) International Publication Number  
**WO 2005/000492 A2**

(51) International Patent Classification<sup>7</sup>: **B21B**

(21) International Application Number:  
PCT/US2004/017851

(22) International Filing Date: 4 June 2004 (04.06.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
60/476,453 6 June 2003 (06.06.2003) US

CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

(71) Applicant and  
(72) Inventor: SOUKUP, Michael [US/US]; 1371 Dicus Mill Road, Severn, MD 21144 (US).

Declaration under Rule 4.17:  
— of inventorship (Rule 4.17(iv)) for US only

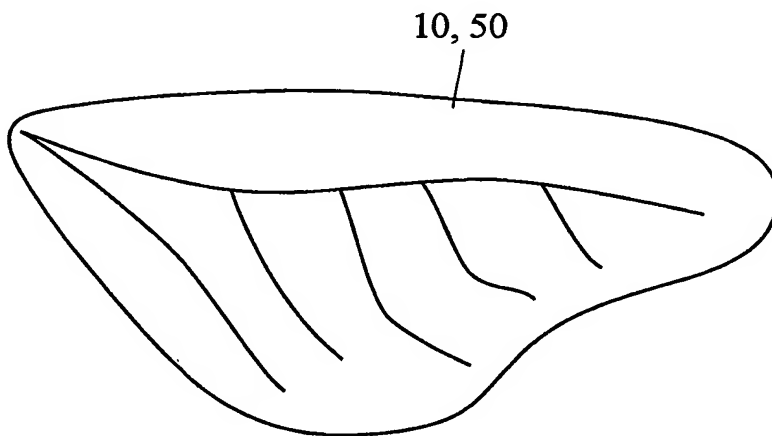
(74) Agent: ROYAL, Craig, W.; Law Offices of Royal W. Craig, 10 N. Calvert Street, Suite 153, Baltimore, MD 21202 (US).

Published:  
— without international search report and to be republished upon receipt of that report

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: BUTTERFLY WING LAMINATION PROCESS AND METHOD OF USE



(57) Abstract: A multi-layer lamination process for butterfly wings to facilitate their use in jewelry, accessories, gift items, crafts, etc. The process steps include (1) the mixing of a liquid epoxy resin, (2) application of a layer of the liquid epoxy resin to a sheet of Mylar<sup>®</sup> (3) affixing a butterfly wing to the liquid epoxy resin/Mylar<sup>®</sup> sheet combination, (4) allowing the layer of liquid epoxy resin to dry, (5) applying a layer of fixative to the exposed side of the butterfly wing, (6) allowing the layer of fixative to dry, (7) applying a first layer of clear lacquer/resin over the fixative, (8) allowing the first layer of lacquer/resin to dry, (9) cutting along the outer perimeter of the butterfly wing to separate the wing

from the remainder of the Mylar<sup>®</sup> sheet, (10) smoothing the edges of the cut-out butterfly wing, (11) the application of a second layer of clear lacquer/resin over the first layer, (12) allowing the second layer of lacquer/resin to dry, (13) applying a third layer of clear lacquer/resin over the second layer, and (14) allowing the third layer of lacquer/resin to dry. In addition, a hole may be drilled through one end of the laminated butterfly wing, and a bail affixed to the hole for jewelry design. The process results in a multi-layered lamination that strengthens and preserves the wing's naturally occurring colors and patterns.

WO 2005/000492 A2

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
6 January 2005 (06.01.2005)

PCT

(10) International Publication Number  
**WO 2005/000492 A3**

(51) International Patent Classification<sup>7</sup>: **A01N 1/00**,  
B44C 5/06

(21) International Application Number:  
PCT/US2004/017851

(22) International Filing Date: 4 June 2004 (04.06.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
60/476,453 6 June 2003 (06.06.2003) US

(71) Applicant and

(72) Inventor: SOUKUP, Michael [US/US]; 1371 Dicus Mill  
Road, Severn, MD 21144 (US).

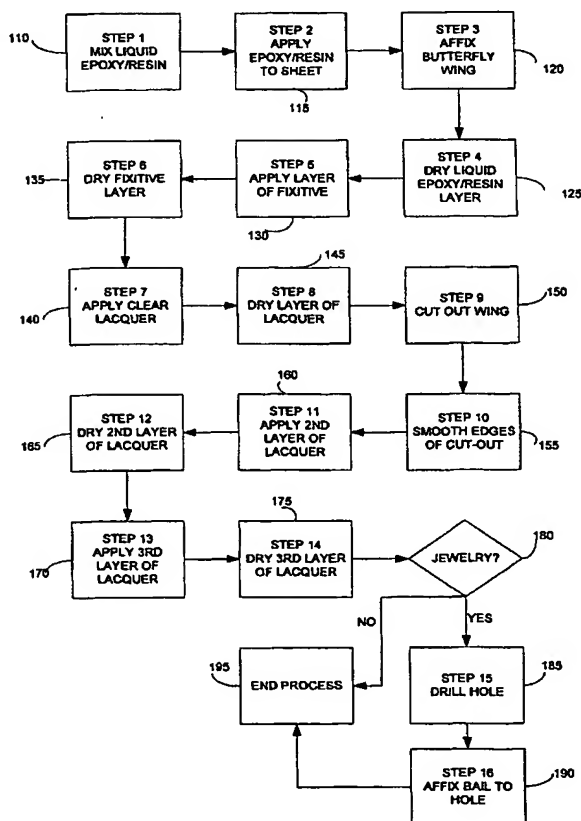
(74) Agent: ROYAL, Craig, W.; Law Offices of Royal W.  
Craig, 10 N. Calvert Street, Suite 153, Baltimore, MD  
21202 (US).

(81) Designated States (unless otherwise indicated, for every  
kind of national protection available): AE, AG, AL, AM,  
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,  
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,  
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,  
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,  
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,  
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,  
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,  
ZW.

(84) Designated States (unless otherwise indicated, for every  
kind of regional protection available): ARIPO (BW, GH,  
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,  
ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),  
European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,  
FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI,  
SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ,  
GW, ML, MR, NE, SN, TD, TG).

[Continued on next page]

(54) Title: BUTTERFLY WING LAMINATION PROCESS AND METHOD OF USE



(57) Abstract: A multi-layer lamination process for butterfly wings to facilitate their use in jewelry, accessories, gift items and the like is disclosed. The process includes the steps of mixing of a liquid epoxy resin (110), application of a layer of the liquid epoxy resin to a sheet of polyester film (115), affixing a butterfly wing to the liquid epoxy resin/polyester film combination (120), allowing the layer of epoxy resin to dry (125), applying a layer of fixative to the exposed side of the butterfly wing (130), allowing the layer of fixative to dry (135), applying a first layer of clear lacquer/resin over the fixative (140), allowing the first layer of lacquer/resin to dry (145), cutting along the outer perimeter of the butterfly wing to separate the wing from the remainder of the polyester film (150), smoothing out the edges of the cut-out butterfly wing (155), application of a second layer of clear lacquer/resin over the first layer (160), allowing the second layer of lacquer/resin to dry (165), application of a third layer of lacquer/resin over the second layer (170), and allowing the third layer of lacquer/resin to dry (175).

WO 2005/000492 A3



**Declaration under Rule 4.17:**

— *of inventorship (Rule 4.17(iv)) for US only*

**Published:**

— *with international search report*

**(88) Date of publication of the international search report:**

10 March 2005

*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*